

ABSTRACT

A bias circuit that includes a rectifier having an input, an output and a DC control voltage input, wherein the rectifier is configured to produce the rectifier output, while providing a substantially high input impedance at the rectifier input, a rectified voltage from an alternating input signal applied at the rectifier input; and a bias extractor having an extractor input, a control voltage input and an extractor output, coupled to the rectifier output, and being configured to produce at the extractor output a DC voltage that is greater in magnitude than the DC control voltage input.